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EXAMINER

TRAN, DALENA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3661

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,261

Applicant(s)

SYRJARINNE, PAULA

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/24/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-33 are pending.
2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 1 in ('050) read on claim 1 of 10/693261. Also, it is obvious that item 1b of 10/693261 the same as 1b of ('050) because each filter solutions assuming a

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different motion model for the receiver, therefore claim 1 of ('050) read on claim 1 of 10/693261.

Claim 2, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 2 in ('050) read on claim 2 of 10/693261. It is obvious that predictive filter solutions is implied as filter solution (as indicated in specification page 5, lines 16-17).

Claim 3, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over corresponding system claim 11 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 11 in ('050) read on claim 3 of 10/693261.

Claim 4, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over corresponding system claim 8 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 8 in ('050) read on claim 4 of 10/693261. It is obvious that the dynamical quantity is determined on the basis of a cellular network because claim 8 ('050) is a system for determining a dynamical quantity for providing a single point solution, and in claim 8, lines 4-8 reads "wherein at least some of the computation of either the single-point solution or the predictive filters is performed in the external computing

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facility and communicated to the receiver via wireless communication"; therefore, it is obvious that the dynamical quantity is determined on the basis of a cellular network.

Claim 5, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 3 in ('050) read on claim 5 of 10/693261. Claim 3 ('050) reads "the dynamical quantity being determined is a quantity comprising one or more unknowns with respect to the receiver selected from the set consisting of: clock bias, position, clock drift, velocity, clock jerk, and acceleration". It is obvious that the position, velocity, and acceleration in claim 3 ('050) are measured by one of motion sensor. Therefore, it is obvious that the dynamical quantity is determined on the basis of at least one motion sensor.

Claim 6, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 4 in ('050) read on claim 6 of 10/693261. It is obvious that claim 4 ('050) read on claim 6 because item 4b of claim 4 reads "means for providing a plurality of filter solutions each assuming a different motion model for the receiver", this implies a different motion model assuming each plurality of filter solutions, therefore claim 4 reads on item 6b of 10/693261. Also, item 4b and 4c ('050) read on item 6c of 10/693261 with the same reason as above.

Claim 7, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,732,050 (refers as '050).

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Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 5 in ('050) read on claim 7 of 10/693261. It is obvious that predictive filter solutions is implied as filter solution (as indicated in specification page 5, lines 16-17).

Claim 8, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 11 in ('050) read on claim 3 of 10/693261.

Claim 9, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 8 in ('050) read on claim 9 of 10/693261. It is obvious that the dynamical quantity is determined on the basis of a cellular network because claim 8 ('050) is a system for determining a dynamical quantity for providing a single point solution, and in claim 8, lines 4-8 reads "wherein at least some of the computation of either the single-point solution or the predictive filters is performed in the external computing facility and communicated to the receiver via wireless communication"; therefore, it is obvious that the dynamical quantity is determined on the basis of a cellular network.

Claim 10, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 10 in ('050) read on claim 10 of 10/693261. Claim 10 ('050)

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reads "the dynamical quantity being determined is a quantity comprising one or more unknowns with respect to the receiver selected from the set consisting of: clock bias, position, clock drift, velocity, clock jerk, and acceleration". It is obvious that the position, velocity, and acceleration in claim 10 ('050) are measured by one of motion sensor. Therefore, it is obvious that the dynamical quantity is determined on the basis of at least one motion sensor.

Claim 11, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 7 in ('050) read on claim 11 of 10/693261. It is obvious that claim 7 ('050) read on claim 11 because item 7b of claim 7 reads "means for providing a plurality of filter solutions each assuming a different motion model for the receiver", this implies a different motion model assuming each plurality of filter solutions, therefore claim 7 reads on item 11b of 10/693261. Also, item 7b and 7c ('050) read on item 11c of 10/693261 with the same reason as above.

Claim 12, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 8 in ('050) read on claim 12 of 10/693261. It is obvious that predictive filters in line 6 of claim 8 ('050) is read on filter solutions in line 6 of 10/693261 because according to specification page 5, lines 16-17, "predictive filter solutions" is an imply of "filter solutions".

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Claims 13 and 17, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 9 in ('050) read on claims 13 and 17 of 10/693261. It is obvious that predictive filter solutions is implied as filter solution (as indicated in specification page 5, lines 16-17).

Claims 14,15,16,18,19, and 20, are rejected the same as claims 8,9, and 10 above.

Claim 21, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,732,050 (refers as '050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 1 in ('050) read on claim 21 of 10/693261. It is obvious that item 1c ('050) claimed as following "combining the plurality of filter solutions to provide a first value of the dynamical quantity based on weights that take into account the likelihood of the suitability of each motion model" read on claim (21c) as following: "combining the plurality of filter solutions to provide a first value of the dynamical quantity using weights assigned to each of plurality of filter solutions" because each plurality of filter solutions assuming a different motion model (1b in '050). Also, claim 1c claimed as following "with the likelihood determined on the basis of agreement of the first value of the dynamical quantity as indicated by a single point solution" read on part "based on a predetermined procedure" (claim 21c) because based on specification page 9, lines 17-20, "The weights are determined based on how well the estimates fit the measurements, i.e. based on the suitability of each of the models to express the motion of the receiver."; this implies of claim 1c ""with the likelihood determined on the basis of

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agreement of the first value of the dynamical quantity as indicated by a single point solution”, because “the basis of agreement of the first value of the dynamical quantity as indicated by a single point solution” implies how well the estimates fit the measurements; and therefore, it is obvious “with the likelihood determined on the basis of agreement of the first value of the dynamical quantity as indicated by a single point solution” implies a predetermined procedure.

Claim 22, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,732,050 (refers as ‘050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 2 in (‘050) read on claim 22 of 10/693261.

Claim 23, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,732,050 (refers as ‘050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 3 in (‘050) read on claim 23 of 10/693261.

Claims 24,25, and 26 are apparatus claims corresponding to method claims 21,22, and 23 above. Therefore, they are rejected for the same rationales set forth as above.

Claim 27, is a system claim corresponding to method claim 21 above. Therefore, it is rejected for the same rationales set forth as above.

Claim 28, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,732,050 (refers as ‘050). Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 8 in (‘050) read on claim 28 of 10/693261.

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Claim 29, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,732,050 (refers as '050).

Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 9 in ('050) read on claim 29 of 10/693261.

Claim 30, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,732,050 (refers as '050).

Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 10 in ('050) read on claim 30 of 10/693261.

Claim 31, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,732,050 (refers as '050).

Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 11 in ('050) read on claim 31 of 10/693261.

Claim 32, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,732,050 (refers as '050).

Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 12 in ('050) read on claim 32 of 10/693261.

Claim 33, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,732,050 (refers as '050).

Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matters of claim 13 in ('050) read on claim 33 of 10/693261.

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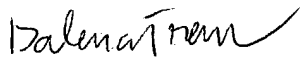
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner
Dalena Tran



May 11, 2004
